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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s):	Paul J. Murphy
Assignee:	Dell USA, L.P.
Title:	Engineering Process for Procuring Components/Peripherals

Serial No.:	09/420,696	Filing Date:	October 19, 1999
Examiner:	Jean B. Fleurantin	Group Art Unit:	2172
Docket No.:	DC-02028	Customer No.:	33438

Austin, Texas
December 3, 2003

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APPEAL BRIEF UNDER 37 CFR § 1.191

Dear Sir:

Applicant submits this Appeal Brief pursuant to the Notice of Appeal filed in this case on September 3, 2003.

Accompanying this Appeal Brief is a petition under 37 C.F.R. § 1.136 for extension of time by one (1) month setting a new time for response of December 3, 2003. A check in the amount of $330.00 is enclosed herewith for this Appeal Brief being the amount specified in 37 C.F.R. 1.17(c). The Commissioner is also authorized to deduct any other amounts required for this appeal brief and to credit any amounts overpaid to Deposit Account. No. 502264. This paper is submitted in triplicate.

I. REAL PARTY IN INTEREST

The real party in interest is the assignee, Dell USA, L.P. as named in the caption above.

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II. RELATED APPEALS AND INTERFERENCES

Based on information and belief, there are no appeals or interferences that could directly affect or be directly affected by or have a bearing on the decision by the Board of Patent Appeals in the pending appeal.

III. STATUS OF CLAIMS

Claims 1 – 36 are pending in the application. Claims 1 – 36 stand rejected. Claims 1 – 36 are appealed. Appendix "A" contains the full set of pending claims.

IV. STATUS OF AMENDMENTS

No Amendments have been filed subsequent to final rejection.

V. SUMMARY OF THE INVENTION

The invention relates to a system and method of component procurement which efficiently provides a centralized location for storing and retrieving component data. The method provides for procuring a manufactured component through a plurality of development stages.

According to one embodiment of the invention, the method includes providing a database (20) for storing information related to procuring a manufactured component (30), sharing the database among a plurality of relevant parties such as a manufacturer and a supplier (32) and inputting data into the database by at least one of the relevant parties during a development stage of the manufactured component (34). The method may also include modifying the database at each development stage (36). See Application, page 5, line 26 – page 6, line 11.

The database (20) holds data related to procurement of components for a computer system and is accessible to a manufacturer and at least one outside vendor. The database (20) includes a pointer for locating data related to at least one of the development stages. The data in the database includes procurement related data such as production information, testing information, regulatory information and cost information. The database includes a plurality of

partitions, each partition relating to manufacturing the component. The database also includes a plurality of fields within each partition, the plurality of fields for logging information related to a plurality of manufacturing development stages. The database also includes a plurality of storage locations for storing data related to the plurality of partitions. See Application, page 6, line 12 – page 8, line 10.

VI. ISSUES

Are claims 1 – 8 patentable under 35 U.S.C. § 103 over Sebastian et al., U.S. Patent No. 5,822,206 (Sebastian)?

Are claims 9 – 36 patentable under 35 U.S.C. § 103 over Sebastian in view of Beauchesne, U.S. Patent No. 5,777,876 (Beauchesne)?

Is the rejection of claims 1 – 8 over Sebastian and claims 9 – 36 over Sebastian in view of Beauchesne based upon impermissible hindsight reconstruction?

VII. GROUPING OF THE CLAIMS

For the purposes of this appeal, claims 1 – 8 may be grouped together and claims 9 – 36 may be grouped together.

VIII. ARGUMENTS

Claims 1 – 8 are patentable over Sebastian.

The invention, as set forth by independent claim 1, relates to a method for procuring a manufactured component through a plurality of development stages. The method includes providing a database for storing information related to procuring the manufactured component; sharing the database among a plurality of relevant parties, at least one of the relevant parties comprising an outside vendor; inputting data into the database by at least one of the relevant parties during a development stage of the manufactured component; and modifying the database at each development stage of the manufactured component if necessary.

Sebastian discloses an engineering design system which enables concurrent design of a part, a tool to make the part and processes used in making the part. A core design module designs the part, the tool to make the part and process to make the part by accessing a plurality of feature templates to locate primitive objects that perform predetermined functions. The part designer is provided with all relevant information effecting the part design (such as information about the process and materials used to make the part) while the part is being designed. (Col. 5, lines 35 – 41.) The system also includes an engineering economics estimator module which provides the resources to trade off various approaches in tool design and manufacturing configuration, manufacturing locale and choice of vendor against production requirement to arrive at optimal choices. (Col. 6, lines 45 – 64.) Applicants have been unable to identify any disclosure of this information being shared among a plurality of relevant parties including an outside vendor or any disclosure of this information being provided to the engineering design system by an outside vendor.

One of the functions within the design module enables a user to enter information or make decisions concerning the design of a part or sub-part. A change to a single design feature may dictate changes in a number of other features, the design module implements and controls these changes. (Col. 18, lines 24 – 34).

Sebastian does not disclose or suggest a method for procuring a manufactured component through a plurality of development stages which includes sharing a database among a plurality of relevant parties, *at least one of the relevant parties comprising an outside vendor*, much less *inputting data into the database by at least one of the relevant parties during a development stage of the manufactured component* and modifying the database at each development stage of the manufactured component if necessary, all as required by independent claim 1. Accordingly, claim 1 is allowable over Sebastian. Claims 2 – 8 depend from claim 1 and are allowable for at least this reason.

Claims 9 – 36 are patentable over Sebastian in view of Beauchesne.

The invention, as set forth by independent claim 9, relates to a database stored on a memory for use in manufacturing a component. The database includes: a plurality of partitions, each partition relating to manufacturing the component; a plurality of fields within each partition,

the plurality of fields for logging information related to a plurality of manufacturing development stages; and a plurality of storage locations for storing data related to the plurality of partitions; wherein the database is accessible to a manufacturer and at least one outside vendor.

The invention, as set forth by independent claim 17, relates to a method of procuring a computer component comprising: providing a database stored on a memory. The database includes: a plurality of partitions, each partition relating to manufacturing the component; a plurality of fields within each partition, the plurality of fields for logging information related to a plurality of manufacturing development stages; and a plurality of storage locations for storing data related to the plurality of partitions, and providing access to the database by a manufacturer and at least one outside vendor.

The invention, as set forth by independent claim 26, relates to a computer system including: a processor; system memory coupled to the processor; and a memory coupled to the processor, the memory including a database for use in manufacturing a component. The database includes: a plurality of partitions, each partition relating to manufacturing the component; a plurality of fields within each partition, the plurality of fields for logging information related to a plurality of manufacturing development stages; and a plurality of storage locations for storing data related to the plurality of partitions; wherein the database is accessible to a manufacturer and at least one outside vendor.

As discussed above, Sebastian discloses an engineering design system which enables concurrent design of a part, a tool to make the part and processes used in making the part. A core design module designs the part, the tool to make the part and process to make the part by accessing a plurality of feature templates to locate primitive objects that perform predetermined functions. The part designer is provided with all relevant information effecting the part design (such as information about the process and materials used to make the part) while the part is being designed. (Col. 5, lines 35 – 41.) The system also includes an engineering economics estimator module which provides the resources to trade off various approaches in tool design and manufacturing configuration, manufacturing locale and choice of vendor against production requirement to arrive at optimal choices. (Col. 6, lines 45 – 64.) Applicants have been unable to identify any disclosure of this information being shared among a plurality of relevant parties

including an outside vendor or any disclosure of this information being provided to the engineering design system by an outside vendor.

One of the functions within the design module enables a user to enter information or make decisions concerning the design of a part or sub-part. A change to a single design feature may dictate changes in a number of other features, the design module implements and controls these changes. (Col. 18, lines 24 – 34).

Beauchesne discloses a database system which provides a manufacturing environment which integrates a plurality of manufacturing processes to control the manufacture of a number of electronic board products on a plurality of manufacturing lines.

Sebastian and Beauchesne, taken alone or in combination, do not disclose or suggest, taken alone or in combination, a database stored on a memory for use in manufacturing a component where the database includes a plurality of partitions, *each partition relating to manufacturing the component*; a plurality of fields within each partition, *the plurality of fields for logging information related to a plurality of manufacturing development stages*; and a plurality of storage locations for storing data related to the plurality of partitions; wherein *the database is accessible to a manufacturer and at least one outside vendor*, all as required by independent claim 9. Accordingly, claim 9 is allowable over Sebastian and Beauchesne. Claims 10 – 16 depend from claim 9 and are allowable for at least this reason.

Sebastian and Beauchesne, taken alone or in combination, do not disclose or suggest, taken alone or in combination, a method of procuring a computer component including providing a database stored on a memory where the database includes a plurality of partitions, *each partition relating to manufacturing the component*; a plurality of fields within each partition, *the plurality of fields for logging information related to a plurality of manufacturing development stages*; and a plurality of storage locations for storing data related to the plurality of partitions, and *providing access to the database by a manufacturer and at least one outside vendor*, all as required by independent claim17. Accordingly, claim 17 is allowable over Sebastian and Beauchesne. Claims 18 – 25 and 34 - 36 depend from claim 17 and are allowable for at least this reason.

Sebastian and Beauchesne, taken alone or in combination, do not disclose or suggest, taken alone or in combination, a computer system including: a processor; system memory coupled to the processor; and a memory coupled to the processor, the memory including a database for use in manufacturing a component where the database includes a plurality of partitions, *each partition relating to manufacturing the component*; a plurality of fields within each partition, *the plurality of fields for logging information related to a plurality of manufacturing development stages*; and a plurality of storage locations for storing data related to the plurality of partitions; wherein *the database is accessible to a manufacturer and at least one outside vendor*, all as required by independent claim 26. Accordingly, claim 26 is allowable over Sebastian and Beauchesne. Claims 27 – 33 depend from claim 26 and are allowable for at least this reason.

The rejection claims 1 – 8 over Sebastian and claims 9 – 36 over Sebastian in view of Beauchesne is based upon impermissible hindsight reconstruction.

In the Final Office action, the examiner set forth:

Sebastian includes the resources to trade-off various approaches in tool design and machine configuration, manufacturing locale and choice of vendor against production requirement to arrive at optimal choices, (see col. 6, lines 45-49). Further, in columns 5 and 16, lines 35-40, 44-64 [sic.] and 55-57, Sebastian teaches provides [sic.] the part designer with all relevant information effecting the part design, the tool designer and the process designer are also provided with all relevant information effecting their designs; and design decisions made by each designer can be include [sic.] as a factor in the decisions by each other designers, [sic.] the functions of part designer, tool designer and process designer often merge; once the customer requirements for the new product are ascertained and a preliminary design concept has been determined, the material selector module determines a list of material properties and associated threshold values that are critical for the success in the design of the product; and the material properties database 90 comprises material costs and once the geometry of the part is determined the cost of the material can be calculated. Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Sebastian with sharing the database among a plurality of relevant parties, at least one of the relevant parties comprising an outside vendor. This modification would allow the teaching of Sebastian to improve the accuracy and the reliability of the engineering process for procuring components peripherals, and provide relationships between various features to be easily defined and examined (see col. 8, lines 29-30). (Final Office action, pages 2 – 3).

The examiner is correct that the teaching of Sebastian would need to be modified to allow the sharing of a database among a plurality of relevant parties. The examiner is also correct that such a modification might enable Sebastian to improve the accuracy and the reliability of the engineering process for procuring components and providing the relationship between various features to be easily defined and examined. However, Applicant respectfully disagrees that such a modification is in any way obvious from the teaching of Sebastian. In fact, Applicant submits that the examiner used hindsight reconstruction to identify both what was not disclosed by Sebastian as well as the advantages that would be achieved by providing Sebastian with that which is not disclosed or suggested by Sebastian.

Additionally, in the Final Office action, the examiner set forth:

[I]n addition to the discussion in claim 1, Sebastian teaches the claimed subject matter except the claimed [sic.] wherein the database is stored on a memory and includes a plurality of partitions, each partition relating to manufacturing the component. However, Beauchesne indicates the recipe table structure contains a plurality of locations organized to store a predetermined set of coded control parameter entries specifying a sequence of process steps which define each process or 'recipe' for manufacturing a specific product associated therewith utilizing certain partitioned units of equipment, (see col. 2, lines 49-54). Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Sebastian and Beauchesne with [sic.] wherein the database is stored on a memory and includes a plurality of partitions, each partition relating to manufacturing the component. This modification would allow the teachings of Sebastian and Beauchesne to provide a common set of process parameters to be applied to the same product manufactured on a plurality of different manufacturing lines using similar units [sic.] equipment (see col. 3, lines 25-27). (Final Office Action pages 3, 4.)

The examiner is correct that the teaching of Sebastian and Beauchesne would need to be modified to allow the sharing of a database among a plurality of relevant parties where the database includes a plurality of partitions, each partition relating to manufacturing the component. The examiner is also correct that such a modification might enable Sebastian and Beauchesne to provide a common set of process parameters to be applied to the same product manufactured on a plurality of different manufacturing lines. However, Applicant respectfully disagrees that such a modification is in any way obvious from the teaching of Sebastian and Beauchesne. In fact, Applicant submits that the examiner used hindsight reconstruction to identify both what was not disclosed by Sebastian and Beauchesne as well as the advantages that

would be achieved by providing Sebastian and Beauchesne with that which is not disclosed or suggested by Sebastian and Beauchesne.

Accordingly, the rejection of claims 1 – 36 is based on an improper hindsight-based obviousness analysis.

> The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification. Wilson and Hendrix fail to suggest any motivation for, or desirability of, the changes espoused by the Examiner and endorsed by the Board.

> Here, the Examiner relied upon hindsight to arrive at the determination of obviousness. It is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the prior art so that the claimed invention is rendered obvious. This court has previously stated that "[o]ne cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention." *In re Fritch*, 23 USPQ2d at 1783-84 (quoting *In re Fine*, 837 F.2d 1071, 1075, 5 USPQ2d 1596, 1600 (Fed. Cir. 1988)).

In this regard, it must be recognized that hindsight reconstruction of claims based on disparate aspects of the prior art may not be employed as a valid basis for the rejection of those claims. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 220 USPQ 303, 312-313 (Fed. Cir. 1983); *Panduit Corp. v. Dennison Manufacturing Co.*, 1 USPQ2d 1593, 1595-1596 (Fed. Cir. 1987). Furthermore, an obviousness determination requires that the invention *as a whole* would have been obvious to a person having ordinary skill in the art. *Connell v. Sears Roebuck & Co.*, 220 USPQ 193 (Fed. Cir. 1983).

To establish obviousness based on a combination of elements disclosed in the prior art or a modification of the prior art, there must be some motivation, suggestion or teaching of the desirability of making the claimed invention. *See In re Dance*, 48 USPQ2d 1635, 1637 (Fed. Cir. 1998); *In re Gordon*, 221 USPQ 1125, 1127 (Fed. Cir. 1984). The motivation, suggestion or teaching to modify references may come explicitly from statements in the prior art, the knowledge of one of ordinary skill in the art, or, in some cases, the nature of the problem to be solved. *In re Dembiczak*, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999). Whether the Office Action relies on an express or implicit showing of a motivation or suggestion to modify or combine references, it must provide particular findings related thereto. *In re Dembiczak*, 50 USPQ2d at

1617. Broad conclusory statements standing alone are not "evidence." *Id.* Thus, the Office Action must include particular *factual findings* that support an assertion that a skilled artisan would have modified the express disclosure of Sebastian to develop the invention recited by independent claims 1,9, 17 and 26. *See In re Kotzab*, 55 USPQ2d 1313, 1317. Applicant is unable to discern the requisite factual basis in Sebastian or the Office Action.
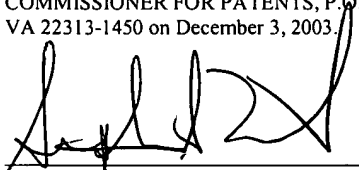
In this regard, the examiner has engaged in a hindsight-based obviousness analysis condemned by the Federal Circuit. To prevent a hindsight-based obviousness analysis, the Federal Circuit has clearly established that the relevant inquiry for determining the scope and content of the prior art is whether there is a reason, suggestion, or motivation in the prior art or elsewhere that would have led one or ordinary skill in the art to combine or modify references. *See Ruiz v. A.B. Chance Co.*, 57 USPQ2d 1161, 1167 (Fed. Cir. 2000); *see also In Re Rouffet*, 47 USPQ2d 1453, 1459 (Fed. Cir. 1998) ("[T]he Board must identify specifically ... the reasons one of ordinary skill in the art would have been motivated to select the references and combine them to render the claimed invention obvious."). Applicant can detect, and the Office Action has pointed to, no motivation or suggestion that would prompt someone of ordinary skill in the art to look to Sebastian in combination for a solution to the problem addressed by Applicant's invention. Such a determination that there is a suggestion or motivation to modify Sebastian is a factual finding that is prerequisite to an ultimate conclusion of obviousness. *Sibia Neurosciences, Inc. v. Cadus Pharma. Corp.*, 55 USPQ2d 1927, 1931 (Fed. Cir. 2000). Applicant respectfully submits that the Office Action is devoid of such a finding.

Without such a finding, a *prima facie* case of obviousness in rejecting claims 1 – 36 under 35 U.S.C. § 103(a) based on Sebastian has not been made. For this further reason, Applicant respectfully submits that claims 1 - 36 are patentably distinguished over Sebastian.
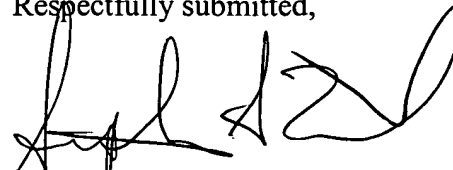

IX. CONCLUSION

For the above reasons, Applicant respectfully submits that rejection of pending Claims 1-36 is unfounded. Accordingly, Applicant requests that the rejection of claims 1-36 be reversed.

This paper is submitted in triplicate.

Respectfully submitted,

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APPENDIX "A"

1. (Previously Presented) A method for procuring a manufactured component through a plurality of development stages, the method comprising:

> providing a database for storing information related to procuring the manufactured component;

> sharing the database among a plurality of relevant parties, at least one of the relevant parties comprising an outside vendor;

> inputting data into the database by at least one of the relevant parties during a development stage of the manufactured component; and

> modifying the database at each development stage of the manufactured component if necessary.

2. (Original) The method of claim 1 wherein the database holds data related to procurement of a plurality of components for a computer system.

3. (Previously Presented) The method of claim 1 further comprising:

> providing a pointer in the database, the pointer locating data related to at least one of the development stages of the manufactured component.

4. (Original) The method of claim 1 wherein the relevant parties include a manufacturer and at least one supplier.

5. (Original) The method of claim 1 wherein the data includes:

> production information;

> testing information;

> regulatory information; and

> cost information.

6. (Previously Presented) The method of claim 1 wherein the database is stored on a memory and includes:

> a plurality of partitions, each partition relating to manufacturing the component;

a plurality of fields within each partition, the plurality of fields for logging information

related to a plurality of manufacturing development stages; and

a plurality of storage locations for storing data related to the plurality of partitions;

wherein the database is accessible to a manufacturer and said outside vendor.

7.　　(Original)　The method of claim 1 wherein the database is accessible via one of an internet connection to a network, an intranet connection to a network and both an internet and intranet connection to a network.

8.　　(Original)　The method of claim 1 wherein the database is accessible via a transportable memory.

9.　　(Original)　A database stored on a memory for use in manufacturing a component, the database comprising:

a plurality of partitions, each partition relating to manufacturing the component;

a plurality of fields within each partition, the plurality of fields for logging information

related to a plurality of manufacturing development stages; and

a plurality of storage locations for storing data related to the plurality of partitions;

wherein the database is accessible to a manufacturer and at least one outside vendor.

10.　　(Original)　The database of claim 9 wherein the database is accessible via one of an internet connection to a network, an intranet connection to a network, and both an internet and intranet connection to a network.

11.　　(Original)　The database of claim 9 wherein the database is accessible via the memory being transportable.

12.　　(Original)　The database of claim 9 wherein the database is capable of activating a plurality of programs for viewing and editing the data, the plurality of programs enabling the manufacturer and the at least one outside vendor to view and edit identical data.

13.　　(Original)　The database of claim 12 wherein the plurality of programs are read-only viewers.

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14.   (Original) The database of claim 9 wherein the plurality of fields includes a plurality of comment fields.

15.   (Original) The computer system of claim 9 wherein the plurality of partitions includes a plurality of forms for inputting and viewing data.

16.   (Original) The database of claim 15 wherein the plurality of forms include at least one of an evaluation form, a regulatory form, a reliability form, a design review form, a manufacturability form, a documentation form, a system test form, a mechanical form, a bench test form and a report form.

17.   (Original) A method of procuring a computer component comprising:
providing a database stored on a memory, the database including:
a plurality of partitions, each partition relating to manufacturing the component;
a plurality of fields within each partition, the plurality of fields for logging information related to a plurality of manufacturing development stages; and
a plurality of storage locations for storing data related to the plurality of partitions, and providing access to the database by a manufacturer and at least one outside vendor.

18.   (Original) The method of claim 17 wherein the database is accessible via one of an internet connection to a network, an intranet connection to a network, and both an internet and intranet connection to a network.

19.   (Original) The method of claim 17 wherein the database is contained in a transportable memory.

20.   (Original) The method of claim 17 further comprising:
enabling the manufacturer and the at least one outside vendor to view identical data via a plurality of programs for viewing and editing the data.

21.   (Original) The method of claim 20 wherein the plurality of programs are read-only viewers.

22. (Original) The method of claim 17 wherein the plurality of fields includes a plurality of comment fields.

23. (Original) The method of claim 17 wherein the plurality of partitions includes a plurality of forms for inputting and viewing data.

24. (Original) The method of claim 23 wherein the plurality of forms include at least one of an evaluation form, a regulatory form, a reliability form, a design review form, a manufacturability form, a documentation form, a system test form, a mechanical form, a bench test form and a report form.

25. (Original) The method of claim 17 wherein the plurality of partitions includes:
a second subset of the plurality of fields for inputting data related to test results.

26. (Original) A computer system comprising:
a processor;
system memory coupled to the processor;
a memory coupled to the processor, the memory including a database for use in manufacturing a component, the database including:
a plurality of partitions, each partition relating to manufacturing the component;
a plurality of fields within each partition, the plurality of fields for logging information related to a plurality of manufacturing development stages; and
a plurality of storage locations for storing data related to the plurality of partitions;
wherein the database is accessible to a manufacturer and at least one outside vendor.

27. (Original) The computer system of claim 26 wherein the database is accessible via a computer network.

28. (Original) The computer system of claim 26 wherein the database is accessible via the memory being transportable.

29. (Original) The computer system of claim 26 wherein the database includes a plurality of programs for editing and viewing the data, the plurality of programs enabling the manufacturer and the at least one outside vendor to view identical data.

30. (Original) The computer system of claim 26 wherein the plurality of viewers are read-only viewers.

31. (Original) The computer system of claim 26 wherein the plurality of fields includes a plurality of comment fields.

32. (Original) The computer system of claim 26 wherein the plurality of partitions includes a plurality of forms for inputting and viewing data.

33. (Original) The computer system of claim 32 wherein the plurality of forms include at least one of an evaluation form, a regulatory form, a reliability form, a design review form, a manufacturability form, a documentation form, a system test form, a mechanical form, a bench test form and a report form.

34. (Original) The method of claim 17, further comprising limiting access of said at least one outside vendor to at least a portion of said database.

35. (Original) The method of claim 17, further comprising providing a plurality of security levels to limit access to said database.

36. (Original) The method of claim 17, wherein said at least one vendor provides technical documentation to said database.